



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,223	09/19/2001	Simon Riches	1509-218	8329

22879 7590 10/18/2005

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

CHAI, LONGBIT

ART UNIT PAPER NUMBER

2131

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,223

Applicant(s)

RICHES ET AL.

Examiner

Longbit Chai

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 90-119 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 90-119 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 89 have been canceled; claims 90 -- 119 have been added in an amendment filed on 8/10/2005.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/4/2005 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2131

3. Claims 90, 92, 94 – 97, 101, 103, 105 – 107, 110, 112 and 114 – 116 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Johnston (Patent Number: 5287478).

As per claim 90, 101 and 110, Johnston teaches a method of recording data during successive data recording sessions on a data storage tape of a tape cartridge loaded in a tape drive, the sessions occurring at different times, the method comprising recording data in each recording session by:

issuing a reposition command to the tape drive to indicate that the data recording session is to start (Johnston: Column 8 Line 40 – 44 and Column 8 Line 54 – 62: Space / Locate are the position command associated with the RD/WR data blocks);

writing a data set to the tape (Johnston: Column 8 Line 40 – 44 and Column 8 Line 54 – 62);

issuing a further reposition command to the tape drive (Johnston: Column 10 Line 51 – 59: the Write command can be issued multiple times and on the subsequent Write commands issued, the tape device will then evidently have to reposition itself so that it has to point to the end of the last Write operation);

creating a code representative of the data in the data set that has been written in the recording session between the, reposition commands (Johnston: Column 10 Line 48 – 55 and Column 9 Line 27: Johnston teaches ECC checksum is calculated to verify that the track has been properly written into the track and the data is always written one group at a time and thereby Johnston teaches the code created after

Art Unit: 2131

each data recording session representing the recorded data and the session during which the data was recorded to meet the claim language);

writing the code into a memory incorporated within the tape cartridges (Johnston: Column 11 Line 18 – 21);

incrementing a code counter indicating a count of the number of codes written into the memory (Johnston: Column 11 Line 18 – 21: the unique block ID number associated with the subcode data is equivalent to the number of codes written into the memory); and

writing the count into a count field of the memory (Johnston: Column 11 Line 18 – 19).

As per claim 92, 103 and 112, Johnston further teaches said the code is a checksum or a cyclic redundancy check (CRC) (Johnston: Column 10 Line 52).

As per claim 94, 105 and 114, Johnston further teaches the memory is a dedicated area of the tape (Johnston: Column 11 Line 18 – 21).

As per claim 95, 106 and 115, Johnston further teaches reading back a data set from the tape; creating a further code representative of the data in the data set read back from the tape; comparing the two codes; and confirming the data set as-valid only if the two codes agree (Johnston: Column 10 Line 48 – 55 and Column 9 Line 27: Johnston teaches ECC checksum is calculated to verify that the track has been

Art Unit: 2131

properly written into the track and the data is always written one group at a time and thereby Johnston teaches the code created after each data recording session representing the recorded data and the session during which the data was recorded to meet the claim language).

As per claim 96, Johnston further teaches the comparing and confirming steps are carried out by a controlling software application (Johnston: Column 10 Line 48 – 55).

As per claim 97, 107 and 116, Johnston teaches at least one of the comparing and confirming steps is carried out by an external reader which is able to at least one of access and display information recorded in the memory (Johnston: Column 5 Line 46 – 54).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2131

4. Claims 91, 102 and 111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (Patent Number: 5287478), in view of Gold (Patent Number: US 6701450 B1).

As per claim 91, 102 and 111, Johnston does not disclose expressly the code is a signature.

Gold teaches the code is a signature (Gold: see for example, Column 20 Line 24 – 31).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gold within the system of Johnston because Gold teaches providing a more convenient data backup and recovery solution in data processing systems (Gold: see for example, Column 3 Line 20 – 21 and Column 1 Line 5 – 8).

5. Claims 93, 104 and 113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (Patent Number: 5287478), in view of Maekawa et al. (Patent Number: 6160679).

As per claim 93, 104 and 113, Johnston does not disclose expressly the memory is a cartridge memory.

Maekawa teaches the memory is a cartridge memory (Maekawa: see for example, Column 3 Line 43 – 49).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Maekawa within the system of Johnston

Art Unit: 2131

because Maekawa teaches providing an auxiliary memory associated with the tape cartridge so that the problems of limitation in size as well as the security concerns of the discrimination information can be resolved (Maekawa: see for example, Column 3 Line 14 – 52).

6. Claims 98 – 100, 108 – 109 and 117 – 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (Patent Number: 5287478), in view of Shnelvar (Patent Number: 6374266).

As per claim 98, 108 and 117, Johnston does not disclose expressly checking whether the number of codes written into the memory has reached a predetermined number and, if so, reporting the tape as read only.

Shnelvar teaches checking whether the number of codes written into the memory has reached a predetermined number and, if so, reporting the tape as read only (Shnelvar: see for example, Column 5 Line 35 – 60, Column 6 Line 17 – 21, Column 7 Line 34 – 40 & Figure 8).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Shnelvar within the system of Johnston because Shnelvar teaches providing a method to resolve the capacity limitation problem of the backup storage when storing the system's program and data files (Shnelvar: see for example, Column 1 Line 30 – 39).

As per claim 99, 109 and 118, Johnston as modified teaches said predetermined number of entries is 16 (Shnelvar: see for example, Figure 3 Element 60: Shnelvar does not disclose expressly predetermined number of entries is 16. However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Shnelvar to accommodate predetermined number of entries is 16 because Shnelvar teaches using a table to store the code (Shnelvar: see for example, Figure 3 Element 60).

As per claim 100, Johnston as modified teaches comparing the codes and number of entries against information held on a secure database (Shnelvar: see for example, Column 5 Line 35 – 60, Column 6 Line 17 – 21 & Johnston: Column 10 Line 48 – 55).

7. Claim 119 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. (Patent Number: 5287478), in view of Ishiguro (Patent Number: 4788641).

As per claim 119, Johnston does not disclose expressly the processor software includes an erase command.

Ishiguro teaches the processor software includes an erase command (Ishiguro: see for example, Column 3 Line 60 – 61).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ishiguro within the system of Johnston

Art Unit: 2131

because Ishiguro teaches providing a method that a plurality of commands and data can be stored and pre-fetched in a magnetic tape system (Ishiguro: see for example, Column 1 Line 10 – 14).

Accordingly, Johnston as modified teaches the processor software includes an erase command that erases both the data on the tape and the contents of the memory (Ishiguro: Column 3 Line 60 – 61; Johnston: Column 11 Line 18 – 21: the Erase command would be like Write command that applies to both data and subcode (i.e. checksum) written into the tape and the memory space of the track, respectively).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Tam (U.S. Patent Number 6374267) discloses "Database backup to the tape drive".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Art Unit: 2131

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Handwritten signature of Longbit Chai, with the letters "LBC" written below it.

Longbit Chai
Examiner
Art Unit 2131



Handwritten signature of Longbit Chai, followed by the text "Primary Examiner", "AU 2131", and the date "10/19/05".

Primary Examiner
AU 2131
10/19/05